

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-247497

(43)Date of publication of application : 24.09.1993

(51)Int.Cl.

C11D 17/06
C11D 3/60
C11D 11/02
//(C11D 3/60
C11D 3:20
C11D 3:33
C11D 3:12)

(21)Application number : 04-171241

(71)Applicant : COLGATE PALMOLIVE CO

(22)Date of filing : 29.06.1992

(72)Inventor : CUSH JAMES FRANK JR
KOLODZIEJ RICHARD M

(30)Priority

Priority number : 91 723146 Priority date : 28.06.1991 Priority country : US

(54) ZEOLITE-BASED SPRAY-DRIED DETERGENT COMPOSITION AND PREPARATION THEREOF

(57)Abstract:

PURPOSE: To provide a detergent composition having high solubility and, at the same time, improved particle mechanical strength and integrity which enable the composition to have long term stability and handling.

CONSTITUTION: The detergent composition is prepared by the steps of (a) forming an aqueous crutcher slurry containing (i) at least about 5 wt.% zeolite, (ii) an effective amount of a bead strengthening agent selected from the group consisting of citric acid, a water soluble salt of citric acid, a nitrilotriacetate, a water soluble salt of a nitriloacetate and a mixture thereof and (iii) a supplementary detergent builder excluding components (i) and (ii), (b) spray-drying the crutcher slurry of step (a) to produce spray-dried particles and (c) coating a sufficient amount of one or more anionic, nonionic and cationic surfactant detergent compositions on the spray-dried particles.

LEGAL STATUS

[Date of request for examination] 29.06.1999

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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